

IN THE CLAIMS

Please amend the claims as follows:

1-11. (Cancelled).

12-14. (Cancelled).

15. (Currently Amended) The method of claim 12 A method of producing a recording medium containing an information signal, comprising:

5 applying a radiation beam, in response to an information signal, to a first area of an information layer of a recording medium to cause the first area of the information layer to assume a first state thereby forming a mark, and

10 applying the radiation beam to a second area of the information layer, before and after the mark, while pulsing the beam to cause the second area of the information layer to assume a second state that is different than the first state, the pulses including erase pulses having a erase power level (P_e) and a bias power level (P_b) between the erase pulses, the bias power level (P_b) being in a range between zero and the erase power level (P_e),
15 in whichwherein:

the bias power level (P_b) increases in the range between zero and the erase power level (P_e) as the recording speed (V) increases when the recording speed is below a chosen recording speed, and

20 the bias power level (P_b) is substantially identical to
the erase power level (P_e) when the recording speed exceeds the
chosen recording speed (29).

16. (Cancelled).

17. (Currently Amended) The method of claim 16 A method of producing a recording medium containing an information signal, comprising:

applying a radiation beam, in response to an information signal, to a first area of an information layer of a recording medium to cause the first area of the information layer to assume a first state thereby forming a mark, and

applying the radiation beam to a second area of the information layer, before and after the mark, while pulsing the beam to cause the second area of the information layer to assume a second state that is different than the first state, the pulses including erase pulses having a erase power level (P_e) and a bias power level (P_b) between the erase pulses, the bias power level

(P_b) being in a range between zero and the erase power level (P_e), wherein the erase pulses have a duty cycle of T_e/T_b , where T_e is the duration of an erase pulse and T_b is the time between two successive erase pulses, and the duty cycle depends on the recording speed (V),

20 and wherein in which the duty cycle increases in a range between nearly zero and unity as the recording speed (V) increases.

18-20. (Cancelled).

21. (Currently Amended) The recording device of claim 18, A recording device comprising:

a radiation source for applying a radiation beam to an information layer of a recording medium;

5 means for moving the radiation beam along the information layer; and

control means to control the power of the radiation beam; for causing a first area of the information layer to assume a first state to form a mark in response to an information 10 signal; and

for pulsing the radiation beam including erase pulses having an erase power level (P_e) and a bias power level (P_b) between the erase pulses to a second area of the information layer, before and after the mark, to cause the second area of the 15 information layer to assume a second state that is different than the first state, the bias power level (P_b) being in a range between zero and the erase power level (P_e), in whichwherein:

the bias power level (P_b) increases in the range between zero and the erase power level (P_e) as the recording speed (V)

20 increases when the recording speed is below a chosen recording speed; and

the bias power level (P_b) is substantially identical to the erase power level (P_e) when the recording speed is above the chosen recording speed.

22. (Cancelled).

23. (Currently Amended) The recording device of claim 22_A recording device comprising:

a radiation source for applying a radiation beam to an information layer of a recording medium;

5 means for moving the radiation beam along the information layer; and

control means to control the power of the radiation beam; for causing a first area of the information layer to assume a first state to form a mark in response to an information 10 signal; and

for pulsing the radiation beam including erase pulses having an erase power level (P_e) and a bias power level (P_b) between the erase pulses to a second area of the information layer, before and after the mark, to cause the second area of the 15 information layer to assume a second state that is different than the first state, the bias power level (P_b) being in a range between zero and the erase power level (P_e),

..... wherein the erase pulses have a duty cycle of T_e / T_p ,
where T_e is the duration of an erase pulse and T_p is the time
20 between two successive erase pulses, and the duty cycle depends on
the recording speed (V) in which,
..... and wherein the duty cycle increases in a range between
nearly zero and unity as the recording speed (V) increases.

24. (Currently Amended) A recording medium containing an
information signal, produced by the method of claim 1215.